Pseudoscarus fuscus.

Two series of scales on the cheek and two scales on the lower preopercular limb; the middle series composed of five scales. Upper lip broad. Jaws whitish with pointed teeth at the angle. Thirteen pectoral rays. Caudal lobes prolonged. Uniform brownish olive, vertical fins darker. Caudal white on its posterior edge.

Length, 10 inches. Locality, Barrier Reef.

NOTE ABOUT THE TEMPERATURE OF THE SEA WATER ALONG THE EASTERN COAST OF AUSTRALIA, OBSERVED IN JULY 1878 AND 1883.

By N. de Miklouho-Maclay.

Having found a complete absence of published records of observation of the temperature of sea water on the Coasts of Australia, I venture to submit to the Society these very limited observations, hoping that they may be of some use for Zoologists who are interested in the geographical distribution of marine animals.

On my way from Singapore to Sydney in 1878, it appeared interesting to me to observe the temperature of the sea water as we were steaming near the coast of Australia. I used to do it every day at noon with a very exact thermometer of Grainer in Berlin (well compared with the Standard Thermometer of the Meteorological Observatory of Batavia), leaving the same each time over ten minutes in the bucket of sea water, which was hauled up from the sea just before the observation.

Before submerging the thermometer in the water, it was left suspended for half-an-hour or more in a shady place under the awning, to ascertain the temperature of the air.

THESE OBSERVATIONS ARE FOLLOWING :—

July.	Lat. South.	Long. East.	Near what Place.	Temperature of Sea Water.	Appearance of the Sea.	Temperature of the Air.	Appearance of the Sky.
8	11° 47′	143° 09′	.....	27° 5 C.	Sea rough	21° 1 C.	Cloudy
9	14° 08′	144° 36′	.....	26° 4 —	,, rough	27° 0 —	Clear
10	15° 26′	145° 15′	Cooktown	24° 5 —	,, rough	27° 5 —	Clear
11	17° 57′	146° 20′	Cardwell	24° 3 —	....	25° 6 —	Clear
12	19° 43′	148° 60′	Bowen	23° 6 —	....	23° 5 —	Clear
13	22° 09′	150° 40′	.....	22° 8 —	,, rough	21° 5 —	Clear
14	23° 55′	152° 22′	P. Curtis	21° 5 —	....	20° 0 —	Clear
15	26° 41′	153° 23′	.....	22° 4 —	Current from N.	20° 0 —	Clear
16	27° 48′	153° 37′	.....	22° 0 —	,, rough	20° 0 —	Clear
,,	At Anchor Moreton Bay		.....	20° 5 —	,, calm	20° 0 —	Clear
17	31° 04′	152° 24′	.....	22° 0 —	,, rough	17° 8 —	Clear
18	Outside Sydney Heads		.....	19° 0 —	,, rough	17° 0 —	Clear
,,	At Wharf Darling Harbour		.....	14° 7 —	,, calm	17° 0 —	Clear
20	,, ,,	,, ,,	.....	15° 0 —	,, calm	18° 5 —	Clear*
,,	Outside Sydney Heads		.....	18° 0 —	,, calm	18° 5 —	Clear
21	36° 06′	150° 10′	.....	15° 5 —	,, calm	15° 0 —	Clear
22	38° 52′	146° 14′	.....	12° 5 —	,, calm	15° 0 —	Clear
,,	At Port Phillip Heads		.....	13° 0 —	,, calm	14° 5 —	Clear
,,	At Sandridge Wharf		.....	11° 0 —	,, calm	16° 0 —	Clear

* For the observations from the 20th to the 22nd, I am indebted to Mr. St. John A. Biggs, Purser of the R.M.S. "Somerset," who was kind enough to continue with my Thermometer which I left on board for this purpose until the arrival of the ship in Melbourne.

On my return voyage from Hongkong to Sydney in June 1883, I had the opportunity to verify the correctness of these observations, and found that the list of temperatures obtained, agreed very closely with the former, taking into consideration the slight difference in the time of the year, and that the observations have not been made in both cases in exactly the same place.

Date.	Near what Place.	Temperature of the Air.	Temperature of the Sea Water.
30th June	Hogestone Island	27° 2 C	26° 5 C
31st ,,	Cap. Sidmouth	26° 7 —	25° 9 —
2nd July	P. Douglas	27° 1 —	25° 4 —
3rd ,,	Townsville	25° 6 —	24° 0 —
4th ,,	Percy Islands	22° 3 —	24° 0 —
5th ,,	L. Elliot Islands	17° 2 —	23° 6 —
6th ,,	Glass Houses	22° 3 —	22° 1 —
7th ,,	Moreton Bay (on anchor)	20° 5 —	18° 0 —(1)
8th ,,	P. Danger	19° 6 —	22° 0 —
9th ,,	Solitary Island	20° 1 —	21° 7 —
10th ,,	Broken Bay	17° 8 —	18° 8 —
,, ,,	Sydney Heads	,,	18° 5 —
,, ,,	Port Jackson	,,	16° 2 —(2)

The steamers on the Eastern Coast of Australia follow a track from 5 to 10 miles (seldom more) distant from the shore, and the average depth of the sea in this track varies from 12 to 60 fathoms. (See Admiralty Charts.)

The current which runs from the northward (with a velocity of 1 to 3 knots) (3) on the Eastern Coast of Australia, from about the latitude of Brisbane, is, as we know, a part of the current which having followed the tropic of the Capricorn divides in two branches on the south end of New Caledonia; one in the direction towards Torres Straits, the other along the coast of New South Wales, turns near Cape Howe towards New Zealand. This current is a warm one and explain the reason why the sea water at the Heads of Sydney Harbour is about 7° C warmer than the

(1). An hour before anchoring at Moreton Bay, I found the temperature of the sea water to be 23° 3, and leaving the bay and passing Stadbroke Island outside the temperature of the sea water was 22° 5.

(2). The place of observation was passing Camp Cove.

(3) Wellbank's Australian Nautical Almanac, 1884, p. 280.

water on the Western South American coast in about the same latitude (Valparaiso) (4), which on the other hand is, on account of the cold Peruvian current, lower than on the Eastern Coast of South America, in the Atlantic Ocean, where (in the latitude of 42° and 43° south) the temperature of the sea water on the surface varies between 14° 0 and 14° 5 C (5).

My fragmentary observations of sea temperature prove also, that during the winter months, the sea water in comparatively shallow bays in Port Jackson (in Darling Harbour the depth is from 3 to 5½ fathom) is much colder than the water of the ocean. It is very likely that in the hot summer months the reverse is the rule, i.e., that the water of the ocean is colder than the water in the Bay.

ON TWO NEW SPECIES OF MACROPUS FROM THE SOUTH COAST OF NEW-GUINEA.

(Plate XXXIX.)

By N. de Miklouho-Maclay.

Amongst the collection of Mammals from New Guinea in the Macleay Museum, two undescribed species of Kangaroo attracted my attention. Through the well-known kindness of Mr. W. Macleay, I had the opportunity of examining the specimens sufficiently to enable me to bring the following remarks and description before this Society.

Both were remarkably alike in the general proportions of the body and the colour of the fur. One was smaller than the other, which difference however, I accounted for its being a female. But the closer inspection of its incisors (Fig. 5 and Fig. 8), presented

(4). I found the temperature of the sea water on the surface in the harbour of Valparaiso (in May, 1871) to vary from 12° 0 and 12° 5 C.

(5). Vide: my letter on the way to New Guinea in 1871, published in the "Iswestija" of the Imp. Russ. Geograph. Soc. of St. Petersburg.